



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0485; Directorate Identifier 2014-NM-093-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2007-13-05, which applies to all The Boeing Company Model 777 airplanes. AD 2007-13-05 currently requires repetitive measurements of the freeplay of the right and left elevators, rudder, and rudder tab, and related investigative and corrective actions if necessary. Since we issued AD 2007-13-05, the manufacturer determined that the procedure for the rudder freeplay inspection does not properly detect excessive freeplay in the rudder control load loop. This proposed AD would require repetitive freeplay inspections and lubrication of the right and left elevators, rudder, and rudder tab; and related investigative and corrective actions if necessary. We are proposing this AD to detect and correct flutter, which can cause damage to the control surface structure and consequent loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0485; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Haytham Alaidy, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6573; fax: 425-917-6590; email: Haytham.Alaidy@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0485; Directorate Identifier 2014-NM-093-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On April 11, 2007, we issued AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007), for all The Boeing Company Model 777 airplanes. AD 2007-13-05 requires repetitive measurement of the freeplay of the right and left elevators, rudder, and rudder tab; and related investigative and corrective actions if necessary. AD 2007-13-05 also requires repetitive lubrication of the elevator, rudder, and rudder tab components. AD 2007-13-05 resulted from reports of freeplay-induced vibration of unbalanced control surfaces. We issued AD 2007-13-05 to detect and correct flutter, which can cause damage to the control surface structure and consequent loss of control of the airplane.

Actions Since AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007) Was Issued

Since we issued AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007), the manufacturer determined that the procedure for the rudder freeplay inspection does not properly detect excessive freeplay in the rudder control load loop.

Relevant Service Information

We reviewed Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0485.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

Although this proposed AD does not explicitly restate the requirements of AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007), this proposed AD would retain all requirements of AD 2007-13-05. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraphs (g) and (h) of this proposed AD.

This proposed AD would require repetitive inspections (measurements) of the freeplay of the right and left elevators, rudder, and rudder tab; and related investigative and corrective actions if necessary. This proposed AD would also require repetitive lubrication of the elevator, rudder, and rudder tab components.

The phrase "corrective actions" is used in this proposed AD. "Corrective actions" are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

Costs of Compliance

We estimate that this proposed AD affects 142 airplanes of U.S. registry. The new actions of this proposed AD would add no additional economic burden to that imposed by AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007). The current costs for this AD are repeated for the convenience of affected operators, as follows:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Measurement (inspection), elevator	4 work-hours X \$85 per hour = \$340 per measurement (inspection) cycle	\$0	\$340 per measurement (inspection) cycle	\$48,280 per measurement (inspection) cycle
Lubrication, elevator	17 work-hours X \$85 per hour = \$1,445 per lubrication cycle	\$0	\$1,445 per lubrication cycle	\$205,190 per lubrication cycle
Measurement (inspection), rudder	4 work-hours X \$85 per hour = \$340 per measurement (inspection) cycle	\$0	\$340 per measurement (inspection) cycle	\$48,280 per measurement (inspection) cycle
Lubrication, rudder	7 work-hours X \$85 per hour = \$595 per lubrication cycle	\$0	\$595 per lubrication cycle	\$84,490 per lubrication cycle
Measurement (inspection), rudder tab	3 work-hours X \$85 per hour = \$255 per measurement (inspection) cycle	\$0	\$255 per measurement (inspection) cycle	\$36,210 per measurement (inspection) cycle
Lubrication, rudder tab	5 work-hours X \$85 per hour = \$425 per lubrication cycle	\$0	\$425 per lubrication cycle	\$60,350 per lubrication cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition corrective actions specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007), and adding the following new AD:

The Boeing Company: Docket No. FAA-2014-0485; Directorate Identifier 2014-NM-093-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007).

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Airplanes having a Variable Number identified in paragraph 1.A., “Effectivity,” of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014.

(2) Airplanes having a date of issuance of the original airworthiness certificate or date of issuance of the original export certificate of airworthiness on or after January 27, 2014.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by the manufacturer’s determination that the procedure for the rudder freeplay inspection does not properly detect excessive freeplay in the rudder control load loop. We are issuing this AD to detect and correct flutter, which can cause damage to the control surface structure and consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections of Elevators, Rudder, and Rudder Tab

At the applicable times specified in tables 1, 2, and 3 of paragraph 1.E. “Compliance,” of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, except as provided by paragraph (i) of this AD: Inspect the freeplay of the right and left elevators, rudder, and rudder tab by accomplishing all of the actions specified in Parts 1, 3, and 5 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014. Repeat the inspections thereafter at the intervals specified in tables 1, 2, and 3 of paragraph 1.E. “Compliance,” of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014. If during any inspection required by this paragraph,

the rudder freeplay exceeds any applicable measurement specified in Part 1, 3, or 5 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, before further flight, do the applicable corrective actions in accordance with Parts 1, 3, or 5 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014.

(h) Repetitive Lubrication

At the applicable times specified in tables 1, 2, and 3 of paragraph 1.E. “Compliance,” of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, except as provided by paragraph (i) of this AD: Lubricate the elevator components, rudder components, and rudder tab components, by accomplishing all of the actions specified in Parts 2, 4, and 6 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, as applicable. Repeat the lubrication thereafter at the interval specified in tables 1, 2, and 3 of paragraph 1.E. “Compliance,” of Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, as applicable.

(i) Exception to Service Information Specifications

Where Boeing Special Attention Service Bulletin 777-27-0062, Revision 2, dated January 27, 2014, specifies a compliance time “after the original issue date on this service bulletin” this AD requires compliance within the specified compliance time after July 25, 2007 (the effective date of AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007)).

(j) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (j)(1) or (j)(2) of this AD.

(1) Boeing Special Attention Service Bulletin 777-27-0062, dated July 18, 2006,

which was incorporated by reference in AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007).

(2) Boeing Special Attention Service Bulletin 777-27-0062, Revision 1, dated October 1, 2009, which is not incorporated by reference in this AD.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2007-13-05, Amendment 39-15109 (72 FR 33856, June 20, 2007), are not approved as AMOCs for this AD.

(l) Related Information

(1) For more information about this AD, contact Haytham Alaidy, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office

(ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6573; fax: 425-917-6590; email: Haytham.Alaidy@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on July 17, 2014.

John P. Piccola,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2014-17780 Filed 07/28/2014 at 8:45 am; Publication Date: 07/29/2014]